

How to Make a TERRARIUM

By R. T. FOX



One of the most delightful ways to grow a collection of small plants is in a terrarium. This glass enclosure protects the plants from drying out, and enables you to grow plants or to start new plants under perfectly controlled conditions.

The forerunner of the terrarium was the Wardian case, a glass box devised by an early English botanist. The Wardian case was used to house plants collected in distant countries. It protected them from unfavorable weather conditions, salt air, deserts and shifting temperatures. It also enabled the early botanists to grow plant specimens under the most ideal conditions. Most recently, this method of growing plants has moved from the laboratory into the home where it has contributed a very appealing as well as practical decorative touch.

Containers

Modern terrariums are patterned directly after the Wardian case. Glass jars, old-fashioned candy jars, fish bowls, aquariums, large goblets, or bottles can be used. The only requirements are a clear glass container and a cover. Cloudy or tinted glass filters out too much light to be practical. A cover is necessary to control the moisture content and humidity of the terrarium.

The size of the container is optional. Very large containers such as large aquariums, fish globes, and wine carboys enable you to use large scale materials such as small evergreens and deciduous tree seedlings. Smaller containers are limited to tiny plants. The scale of the plants should be in keeping with the size of the container.

The container should be large enough to allow some leeway in arranging materials. A practical and inexpensive container is a gallon-size jar used for mayonnaise, pickles and relishes. These are frequently obtainable from restaurants and cafeterias. The opening is large enough to allow you to put your hand inside the container, and it is large enough to hold a good selection of plants.

Soil

A mixture of one part sand, one part peat moss or humus, and one part loam soil is recommended for terrariums. One level teaspoon of 5-10-5 fertilizer should be added to a six-inch potful of this mixture. Regular garden soil is not recommended because it becomes soggy.

Drainage

Because a terrarium has no drainage hole, some provision for drainage must be made. In smaller containers, the moss used on the bottom of the terrarium acts as a drainage layer.

In larger containers, several pieces of broken pot or charcoal, or a layer of sand may be put in after the initial layer of moss is put down.

Plants

Terrariums may be made either of native or tropical plants. If you have many small house plants such as African violets, tropical ferns, miniature ivy and peperomia, you might like to combine them in a terrarium for ease of care. If you wish to use native materials, however, a short walk in a woodsy ravine, or along a woodland brook will provide you with the opportunity to gather a variety of native plants. It is not a good idea to combine native and tropical materials. However, native mosses and lichens can be used to advantage in tropical plant terrariums. Cacti cannot be planted in terrariums because the humid growing conditions cause them to rot.

Native plants

Rattlesnake-plantain, *Goodyera repens*,
G. pubescens
Partridgeberry, *Mitchella repens*
Rock polypody, *Polypodium virginianum*
Pipsissewa, *Chimaphila maculata*, *C. umbellata*
Wood Anemone, *Anemone quinquefolia*
Hepatica, *Hepatica americana*, *H. acutiloba*
Foam flower, *Tiarella cordifolia*
Wood violets, *Viola* species
Pussytoes, *Antennaria* species
Hawkweed, *Hieracium venosum*
Wild strawberry, *Fragaria virginiana*
Wintergreen, *Gaultheria repens*
Goldthread, *Coptis groenlandica*
Wood betony, *Pedicularia canadensis*

Seedling trees:

Yew, *Taxus canadensis*
Juniper, *Juniperus virginiana*
White pine, *Pinus strobus*
Hemlock, *Tsuga canadensis*

Tropical plants

African violets, *Saintpaulia ionantha*
Acorus, *Acorus gramineus* 'Variegatus'
Podocarpus, *Podocarpus macrophylla*
Dracena, *Dracena Sanderiana*
Dracena, *Dracaena Godseffiana*
Miniature peperomias, *Peperomia* species
Creeping fig, *Ficus pumila*
Scindapsus, *Scindapsus aureus*
Croton, *Codiaeum variegatum*
Wandering jew, *Zebrina pendula*
Hahn's Sansevieria, *Sansevieria* 'Hahnii'
Syngonium, *Syngonium podophyllum*
Philodendron, *Philodendron* species
Bromeliads, *Cryptanthus*, *Billbergia*,
Aechmea species
Pteris, *Pteris* species
Selaginella, *Selaginella* species
Ivy, *Hedera helix*
Prayer plant, *Maranta bicolor*
Crassula, *Crassula argentea*
Kalanchoe, *Kalanchoe* species (especially *K. blossfeldiana*)
Echeveria, *Echeveria* species

PLANTING PROCEDURE

Collect flat mosses from moist woodland areas. Select the thin "sheet moss" that grows on flat stones and fallen logs. Place this flat moss face downwards in the glass containers so that the mossy side shows through from the bottom.

After placing the moss, add necessary drainage material and soil. The soil need not be excessive—just enough to hold the plants in position. Arrange the plant materials in a logical design. If you wish to display the terrarium mainly from one side, which is the usual case, build up the moss and soil towards the back of the container. Use larger plants toward the back. Cluster smaller plants and creeping materials toward the front. If you wish to make a terrarium to be viewed from all sides, plant the larger materials in the center and use smaller plants around the sides.

In setting the plants, try to create a woodland or tropical scene. Use one or two taller plants to simulate trees, some medium sized materials for shrubs, and creeping vines, mosses and lichens for groundcovers. An open glade may be made with a flat piece of moss or a flat, mossy stone. The foreground should be of "sheet moss" to allow a full view into the terrarium.

Do not crowd the materials. The plants should not be pressed against the sides of the container, nor crowded closely against each other. No soil should show. Open spaces may be filled in with pebbles, mosses, lichens and small creeping vines.

A small figurine of good workmanship, a bit of lichen, covered bark, an interestingly shaped stone, or a small piece of driftwood may be added as a point of interest. Stones may be partially buried to form a miniature ledge.



Three stages in planting procedure show (left) moss, drainage material and soil in place, (center) small plants arranged, (right) finished terrarium with cover.

Do not, under any circumstances, clutter up your terrarium with unlikely bits of cheap pottery. You will find that a restrained arrangement of plants and accessory materials will give the best effect. Remember that plants will thrive under these ideal growing conditions, so they will need some space to grow.

It is not necessary to have all of the plants rooted. You may use "slips" or unrooted cuttings. Do not be concerned about covering roots thoroughly. The high humidity will prevent roots from drying until they have a chance to grow down into the soil.

Care

After the terrarium is planted, wet down the plants and soil with a bulb sprayer. Add water until it starts to seep through the moss on the bottom. Wipe off the inside of the glass with a tissue and put a glass cover over the top of the terrarium to prevent the moisture from escaping. A glass dish, glass ashtray, or a piece of windowglass can be used as a cover. You may even have a glass shop cut a cover to fit the top of the container exactly. A simple temporary cover may be made from cellophane, pliofilm or saran-wrap attached with a rubber band or scotch tape.

Do not let water stand in the bottom of the terrarium. If you overwater, remove the cover for several hours and allow the excess water to evaporate. Plants need very little extra water in a terrarium. Moisture condenses on the sides of the glass and drips back into the soil where it is reused by the plants. A small amount of water may be added about once a month.

Place the terrarium in a light place, but not in the direct sun. If plants become too tall, pinch them back. Remove any plants that tend to crowd out the others.

A terrarium usually will last through one year; then it should be redesigned. Some of the old plants may be reused, but fresh mosses and new plants may be added to provide new color and interest.

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